



Robert S. James

Senior Project Manager

Department

Engineering Services

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Locations

Jackson, MS

Biography

Dr. James holds a B.C.E and M.S. in Civil Engineering from Auburn University and a Ph.D. in Civil Engineering from Mississippi State University. He has been a registered professional engineer for over 20 years and is licensed in Alabama, Florida, Louisiana, Mississippi and Texas. He has over 25 years of experience in research, testing, design, and construction of pavement, civil materials, and residential and commercial building construction.

Dr. James has developed mix designs and pavement structures of asphalt and concrete pavements for private clients, state and federal government agencies, and the military. He has researched pavement materials, design and construction processes, and construction and laboratory equipment. He has developed airfield pavement management strategies and is familiar with concrete and asphalt pavement distresses.

As an inspector, Dr. James has performed pile foundation inspections, performed legal compliance and best practice audits for asphalt and concrete plants, and determined causes for pavement failures. He also has knowledge and experience investigating building envelope failures, including foundation, floor, wall, and roof systems. He has forensic engineering experience in high-load pavements, airfields, residential and commercial structures, soils, asphalt and concrete, masonry, roofs, building components, waterproofing, construction materials, building codes, storm damage, and water infiltration damage. Dr. James has formally instructed industry personnel on proper lab and field-testing techniques, taught high school physics, and occasionally guest lectures for high school engineering classes.

Credentials

- Professional Engineer

Professional Experience

- 2024 - Current | Senior Project Manager | YA Engineering Services
- 2019 - 2024 | Principal Engineer/Owner | Grover James Engineering/RSJ Engineers
- 2006 - 2012 | Pavement/Materials Engineer | Burns Cooley Dennis, Inc.
- 2005 - 2006 | Materials Engineer III/Lab Manager | APAC Materials Services
- 2000 - 2005 | Research Engineer | National Center for Asphalt Technology
- 1999 - 2000 | Staff Professional | LAW Engineering

Area of Practice

- Building Envelope
- Damage Assessment
- Roofing
- Traffic Engineering

Publications and Presentations

- 2017 - "State of Knowledge for Cantabro Testing of Dense Graded Asphalt" Journal of Materials in Civil Engineering, Volume 29, Issue 10
- 2015 - "Development of Design Gyration Levels for Airfield Asphalt Pavement" Advances in Civil Engineering Materials, Volume 4, Issue Number 1
- 2010 - "Characterization of Asphalt Drainage Course Layers" FHWA/MS-DOT-RD-10-181
- 2010 - "Design of Hot Mix Asphalt for Airfield Using the Superpave Gyratory Compactor" Report Presented to 2010 Federal Aviation Administration Worldwide Airport Technology Transfer Conference
- 2009 - "Bottom-up Fatigue Cracking of Low-Volume Flexible Pavement Analysis from Instrumented Testing" Journal of the Transportation Research Board, No. 2094
- 2008 - "Hot Mix Asphalt Mix Selection Guide for Mississippi" FHWA/MS-DOT-RD-08-204
- 2007 - "Implementation of Superpave Mix Design for Airfield Pavements." Report Presented to 2007 Federal Aviation Administration Worldwide Airport Technology Transfer Conference
- 2007 - "Effect of Aggregate Degradation on Volumetric Properties of Georgia's Hot Mix Asphalt" Journal of the Transportation Research Board, No. 1998
- 2006 - "Adjustment of Mix Designs for Gradation Variations Resulting from Aggregate Breakdown During the Design, Production and Construction of Asphalt Mixtures" Georgia Department of Transportation
- 2005 - "Determining NDESIGN for SMA Mixtures in Alabama" Alabama Department of Transportation Research Project 930-584.
- 2005 - "Tire/Pavement Noise Characteristics of HMA Pavements (With Discussion)" Journal of Association of Asphalt Paving Technologists, Volume 74
- 2004 - "Use of Micro-Deval Test to Evaluate the Toughness of Coarse Aggregates to be Used in Hot Mix Asphalt." 2004 Transportation Systems Workshop
- 2003 - "Micro-Deval Testing of Aggregates in the Southeast" Journal of the Transportation Research Board. No. 1837
- 2003 - Development of Mix Design Criteria for 4.75 mm Superpave Mixes." Journal of the Transportation Research Record No. 1819, Volume II

Education

- Mississippi State University - PhD - Civil Engineering - Starkville - Mississippi
- Auburn University - Master - Civil Engineering - Auburn - Alabama
- Auburn University - Bachelor - Civil Engineering - Auburn - Alabama

Affiliations

- National Society for Professional Engineers
- American Society of Civil Engineers
- ASCE Transportation and Development Institute

Licenses

- 26052 - Alabama - Professional Engineer (PE)
 - 88036 - Florida - Professional Engineer (PE)
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- 43760 - Louisiana - Professional Engineer (PE)
 - 17869 - Mississippi - Professional Engineer (PE)
 - 135337 - Texas - Professional Engineer (PE)
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